

## **DRAFT JOB AID: OPERATOR APPLICATION TO CONDUCT DATA LINK OPERATIONS (Operational Authorization)**

**Introduction.** This Data Link Job Aid was developed to provide guidance to operators and inspectors on the process for operators to obtain Operational Data Link authorization (e.g., Operational Specification (OpSpec) or other acceptable approval as applicable) for operation in Oceanic and Remote Airspace.

**Purposes of this Job Aid.** The Job Aid:

1. Provides core Data Link reference documents for operators and inspectors.
2. Part 4 provides a list of operator documents or exhibits that an operator should submit to support an application for Data Link authority.
3. Part 5-7 provides a matrix that shows:
  - Required Data Link program elements.
  - Reference paragraphs related to those elements.
  - Location in operator documents/exhibits where a Data link element is addressed.
  - Columns for inspector to comment on and track the status of various Data Link program elements.

### **Job Aid Organization.**

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### **Points of Contact.**

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Program Information				
Air Traffic Control Procedures				

**DRAFT PART 1:      BASIC EVENTS IN DATA LINK AUTHORIZATION PROCESS**

	<b>Operator Actions</b>	<b>FAA Inspector Actions</b>
1	Establish need to obtain Data Link authority.	
2	Reviews Airplane Flight Manual (AFM), AFM Supplement or Type Certificate Data Sheet or other appropriate documents (e.g., Service Bulletins, Service Letters) to determine aircraft eligibility for Data Link. <b>Operator contacts airplane or avionics manufacturer, if necessary, to confirm airplane eligibility for Data Link.</b>	
3	Contacts the FAA authority to arrange a <b>pre-application meeting</b> to discuss requirements for operational approval.	
4		Establishes, during pre-application meeting: <ul style="list-style-type: none"> <li>• Form and content of operator application (exhibits/documents) supporting Data Link authorization.</li> <li>• Date prior to start of operations when operator application should be submitted for evaluation.</li> </ul> Enters application in NextGen tracker system.
5	Submits operator application (exhibits/documents) to appropriate FAA Authorities with sufficient time prior to the planned start of Data Link operations for evaluation. (FAA will specify time prior to planned start).	
6		Reviews operator application (submissions) and coordinates with operator for missing documentation.
7	Provides revised material when requested.	
8		Issues operational authorization in the form acceptable by the applicable authority, as appropriate, when airworthiness and operational requirements are fulfilled.

**DRAFT PART 2: RECOMMENDED INSPECTOR AND OPERATOR ACTIONS.** The following are suggestions on how the job aid can be used:

	Lead	Action
1	Inspector	Reviews the “ <b>Basic Events in the Data Link Approval Process</b> ” in Part 1 with the operator in the pre-application meeting to provide an overview of approval process events.
2	Inspector	Reviews this Job Aid with the operator to establish the form and content of the operator application for Data Link authority.
3	Operator	Uses the Job Aid as a guide to assemble documents/exhibits for its application for Data Link.
4	Operator	Annotates Job Aid to show location of Data Link program elements in the operator exhibits/documents.
5	Operator	Submits Job Aid and Data Link operator application (exhibits/documents) to inspector.
6	Inspector	Annotates Job Aid to show task or document “complete/satisfactory” <u>or</u> “open/further operator action required”.
7	Inspector	Informs the operator as soon as possible, when further operator action is required.
8	Operator	Provides inspector, when requested, with revised material.
9	Inspector	Issues authorization in the form acceptable by the applicable authority (e.g., Operations Specifications (OpSpecs), Management Specifications (MSpecs) or IGA Letter of Authorization (LOA)) to operator when required tasks and documents are completed.

**Primary Source of Core Documents and Information:**

[http://www.faa.gov/about/office\\_org/headquarters\\_offices/avs/offices/afs/afs400/afs470/media/NAT.pdf](http://www.faa.gov/about/office_org/headquarters_offices/avs/offices/afs/afs400/afs470/media/NAT.pdf)

**FAA References**

1. AC 120-70B Operational Authorization Process for use of Data Link Communication System
2. AC 20-140B Guidelines for Design Approval of Aircraft Data Link Communication Systems Supporting Air Traffic Services (ATS)
3. AC 91-70A Oceanic and International Operations
4. FAA Inspector Guidance (8900.1) Global Operational Data Link Document (GOLD) 2<sup>nd</sup> Edition
5. ICAO Doc 9869 Manual on Required Communication Performance
6. ICAO Doc 007 North Atlantic Operations and Airspace Manual
7. NAT OPS Bulletin (Oceanic Errors Safety Bulletin – OESB)

**Recommended Inspector and Operator Actions.** The following are suggestions on how the Job Aid can be used:

1. In the pre-application meeting with the operator, the inspector first provides an overview of approval process events (see FAA references above).
2. Inspector next reviews this Job Aid to inform the operator of the form and content of the operator application for Data Link authority.
3. Operator uses Job Aid as guide to assemble documents/exhibits for Data Link application. See Part 4 below for suggested list of documents/exhibits.
4. Operator annotates Job Aid to show location of Data Link program elements in the operator documents/exhibits and submit to inspector.
5. Inspector annotates Job Aid to show task or document complete/satisfactory or open/further operator action required.
6. Inspector informs the operator as soon as possible when further operator action is required.
7. When requested, operator provides inspector with revised material.
8. Inspector issues operational authorization in the form of accepted by the applicable authority to operator when required tasks and documents are completed.

**DRAFT PART 3: GENERAL OPERATOR INFORMATION**

**OPERATOR NAME:** \_\_\_\_\_

**AIRCRAFT MAKE(s)/MODEL(s), REG NUMBER(s), S/N(s)**

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**DATE OF PRE-APPLICATION MEETING** \_\_\_\_\_

**DATE APPLICATION RECEIVED:** \_\_\_\_\_ **DATE OPERATOR PLANS TO START DATA LINK OPERATIONS** \_\_\_\_\_

**NOTIFICATION TIME TO ISSUING AUTHORITY ADEQUATE?**      \_\_\_\_YES      \_\_\_\_NO

**AREA(S) OF OPERATION WHERE OPERATOR INITIALLY INTENDS TO START DATA LINK OPERATIONS:**

- 1.
- 2.
- 3.
- 4.

**DRAFT PART 4: OPERATOR EXHIBITS AND DOCUMENTS SUBMITTED**

Exhibit	Exhibit/Document Title		Operator Indication of Inclusion	INSPECTOR COMMENTS
A	<b>Operator Letter Requesting Data Link Authority</b>			
B	<b>List of Source Documents Used.</b> – Aircraft/avionics manufacturer documents showing aircraft airworthiness and data link eligibility			
C	<b>Description of aircraft data link systems.</b>			
	1.	Data link system make/model/series. Include certification documents and current configuration (e.g. current avionics load); Aircraft Modifications (if applicable, list all Aircraft Service Changes (ASC), etc).		
	2.	Include all TC, STC, LOA and AFM limitations and procedures (e.g. compliance with RTCA DO-258/ED-100 and Annex 6 specifications).		
	3.	List of RCP specifications and documentation.(e.g. RCP type (240/400), RCP type allocations, performance based communications, actual communication performance (ACP), etc)		
D	<b>General Information.</b>			
E	<b>Areas of operation/routes where operator intends to use data link.</b>			
	1.	List of areas and/or routes where operator intends to conduct data link operations.		
	2.	List of air traffic centers/service providers with which the operator intends to communicate via data link.		
	3.	List of policy and procedures source documents applicable to each area(s) of operations, such as: a. Operations manuals for specific areas of operations. b. State Aeronautical Information Publications (AIP). c. State Notices to Airmen (NOTAM). d. Chart supplements, OESB.		
F	<b>Flight crew qualification programs.</b> Operator will utilize an approved data link training course. Pilots have reviewed all source documents. Knowledge testing on submitted guidance has been successfully completed.			
	1.	<b>IGA Operator Method of Pilot Training/Knowledge:</b> Acceptable Training Center, Operator In-House Training, Course of Instruction; Record of Course Completion.		
	2.	<b>Air Transport:</b> Pilot training documents as approved.		
G	<b>Manuals and other publications.</b> Operating Manual (highlighting ATC data link areas); Operating Manual Supplements (FANS1/A, CPDLC, ADS-C, etc); Aircraft Flight Manual (highlighting data link ops areas, limitations).			
	1.	<b>IGA Operator Operations Manuals or Documents:</b> Operations Manual <u>or</u>		

		section of operator's application documenting Data Link operational policy/procedures.		
	2.	<b>Air Transport</b> Operations Manuals and checklists		
H		<b>MMEL / MEL:</b> System components required for data link operations are included in current version (FANS 1/A, CPDLC, ADS-C).		
I		<b>Issues unique to a particular operator.</b>		
J		<b>Maintenance Programs:</b> For aircraft with established Data Link maintenance practices, provide list of document or program references. For newly installed Data Link systems, provide data link maintenance practices for review - Aircraft Maintenance Manual (AMM).		
K		<b>Plan for Data Link Event Reporting (DLMA contact info, etc).</b>		
L		<b>Foreign Air Carriers</b>		

**\*SUBMISSION INCLUDES:** \_\_\_\_ **AIRCRAFT/DATA LINK COMPLIANCE DOCUMENTATION**  
\_\_\_\_ **OPERATIONAL POLICY/PROCEDURES**  
\_\_\_\_ **MAINTENANCE MANUAL SECTIONS RELATED TO DATA LINK (if not previously reviewed)**

**Note 1:** Exhibits/documents may be included in a binder or submitted as a stand-alone document(s).

**Note 2:** If stand-alone maintenance and operations manuals are submitted, they may be combined into one manual.

**Note 3:** Only applicable excerpts of documents are required (i.e. MEL section for data link and not entire MEL). The entire document does not have to be submitted and submitting an entire manual is discouraged.

**DRAFT PART 5: CONTENT OF OPERATOR APPLICATION FOR DATA LINK AUTHORIZATION**

	<b><u>CONTENT OF OPERATOR APPLICATION FOR DATA LINK</u></b>	<b><u>(e.g., AC 120-70B)</u></b> <b><u>Ref. Paragraphs:</u></b>	<b>Where Found in Operator Exhibits &amp; Documents.</b>  <b><u>Note:</u></b> operator should update this column to reflect the content of its application	<b>Inspector Recommendation and/or Comments</b>	<b><u>Inspector Tracking:</u></b>  <b>Item Status and Date</b>
1.	<b>Operator Data Link Request Letter.</b> Statement of intent to obtain Data Link authority.	<a href="#">(Recommended)</a>	Exhibit A		
2.	<b>List of Source Documents Used.</b> Airworthiness documents that establish the proposed aircraft/data link system, its approval status and, in a form acceptable to the inspector, a list of airframes.	<a href="#">Page 11, Para 8 (b)</a>	Exhibit B		
3.	<b>Description of aircraft data link systems.</b>		Exhibit C		
3a.	Data link system make/model/series. Include certification documents and current configuration (e.g. current avionics load); Aircraft Modifications (if applicable, list all Aircraft Service Changes (ASC), etc).	<a href="#">Page 9</a> <a href="#">Para 6 (18) (19)</a>	Exhibit C		
3b.	Include all TC, STC, LOA and AFM limitations and procedures (e.g. compliance with RTCA DO-258/ED-100 and Annex 6 specifications).	<a href="#">Page 9, Para 6b (18,19)</a> <a href="#">FSIMS 8900.1</a> <a href="#">(OPSS) A056 Data Link Communications</a>	Exhibit C		
3c.	List of RCP specifications and documentation.	<a href="#">Page 9, Para 7;</a> <a href="#">Page 12, Para 8c;</a> <a href="#">Appendix 6, Page 1</a>	Exhibit C		
4.	<b>General Information.</b>		Exhibit D		
5.	<b>Areas of operations/routes where operator intends to use data link.</b>	<a href="#">Appendix 6, Page 1, Table 1</a>	Exhibit E		
5a.	Operational Authorization	<a href="#">Page 12, Para 8c</a>	Exhibit E		
6.	<b>Flight Crew qualification programs</b>	<a href="#">Page 13, Para 9</a>	Exhibit F		
7.	<b>Manuals and other publications</b>	<a href="#">Page 21, Para 10a.</a>	Exhibit G		
8.	<b>Minimum Equipment List (MEL) and/or Master Minimum Equipment List (MMEL)</b>	<a href="#">Page 21, Para 10b.</a> <a href="#">Appendix 2, Page 1</a>			

	<b>updates, if applicable.</b> (only applicable if operator conducts operations under an MEL/MMEL)	<a href="#">Data Link Communications Minimum Equipment List(MEL) and Master Minimum Equipment List (MMEL) provisions</a>	Exhibit H		
9.	<b>Issues unique to a particular user</b>	<a href="#">Page 21, Para 10d.</a>	Exhibit I		
10.	<b>Maintenance Programs.</b> For aircraft with established data link practices, provide references. For newly installed data link systems, provide maintenance practices for review.	<a href="#">Page 11</a> <a href="#">Para 8 a. General (1)</a> <a href="#">Page 22, Para 11.</a> <a href="#">Per Operator's AMM</a>	Exhibit J		
11.	<b>Plan for Data Link Event Reporting.</b>	<a href="#">Page 24, Para 13.</a> <a href="#">Appendix 1. Page 1.</a>	Exhibit K		
12.	<b>Foreign Air Carriers.</b>	<a href="#">Page 25, Para 14.</a> <a href="#">Appendix 3, Page 1</a>	Exhibit L		



**DRAFT PART 6: BASIC PILOT PROCEDURES FOR DATA LINK OPERATIONS**

<b>Data Link Operational Policy &amp; Procedures</b>	<b><u>Reference Paragraphs:</u></b>  (e.g., AC 120-70B)	<b>Location in Exhibit G &amp; Exhibit H</b>  <b><u>Note:</u></b> operator should update this column to reflect the content of its application	<b>Inspector Recommendations/Comments</b>	<b><u>Inspector Tracking Item</u></b> <b>Status</b> <b>And Date</b>
<b>Flight Planning</b>				
Verify aircraft approved for Data Link operations				
Minimum equipment requirements pertaining to communications				
Annotating the flight plan to be filed with the ATS Provider to show that the aircraft and operator are approved for Data Link operations				
(to be added)				
<b>Preflight Procedures at the Aircraft</b>				
Review maintenance logs and forms. Ensure maintenance action has been taken to correct defects of required equipment				
(to be added)				
<b>Additional procedures - to be added</b>				

**DRAFT PART 7: DATA LINK MAINTENANCE PROGRAM**

<b>Data Link Maintenance Program</b>	<b><u>Reference Paragraphs</u></b> <b>(e.g., AC 120-70B)</b>	<b>Section and/or Paragraph in Exhibit J Where Located</b>	<b>Inspector Recommendations/Comments</b>	<b>Inspector <u>Tracking</u> Item Status and Date</b>
(to be added)				

**Job Aid Changes**